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(54) **High density interconnect structure for use on software defined radio**

(57) A radio and method of making the radio is disclosed having a first set of radio components for processing analog signals in a radio transmission and a second set of radio components for processing digital signals in a radio transmission. The radio comprises a substrate base support, and at least one pocket formed within the substrate. The radio comprises at least one processor, each of the at least one processor being within a corresponding one of the at least one pocket for modulating a radio signal into one of a plurality of waveforms based

on a software instruction set. Each of the at least one processor being in electronic communication with both of the first and second sets of the radio components. A dielectric layer covers a top surface of the substrate and each of the at least one processor. A plurality of vias are formed in the dielectric layer to expose selected portions of each of the at least one processor. A metallization layer is formed over the dielectric layer and over the plurality of vias so that each of the at least one processor is in electrical communication with the first and second sets of radio components.

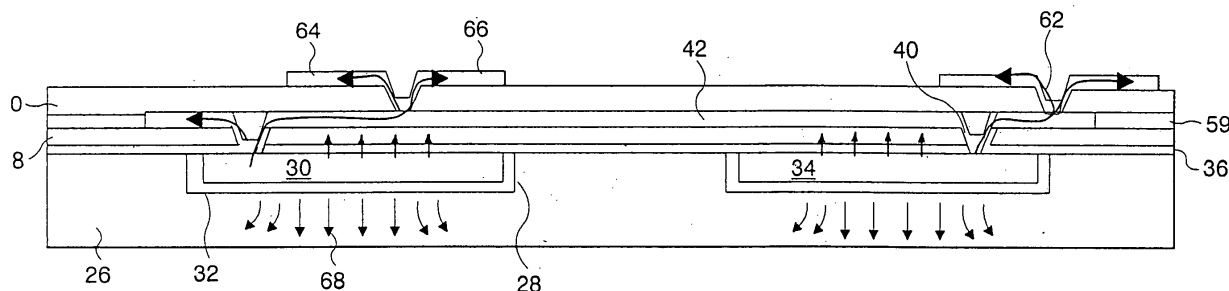


Fig. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 04 01 0934

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The present search report has been drawn up for all claims			
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The Hague		8 March 2007	Hofer, Christiane
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 01 0934

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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